March 23, 2005

Express Mail No. ER 953583679 US

Docket No. 21405 US C038435/0185664

THE UNITED STATES PATENT AND TRADEMARK OFFICE ACTING AS DESIGNATED/ELECTED OFFICE (DO/EO/US) UNDER THE PATENT COOPERATION TREATY CONCERNING A FILING UNDER 35 U.S.C. §371

In re i	Application of:		)		
Tatsu	o HOSHINO et al.		)		
Based on Int'l. Application No.: PCT/EP2003/010293				Examiner	Not yet assigned
Intern	ational Filing Date:	16 September 2003	)	Art Unit:	Not yet assigned
Filed:		Herewith	)		
For:	ASTAXANTHIN PRODUCTION USING FED- BATCH FERMENTATION PROCESS BY PHAFFIA RHODOZYMA				
				Ne	ew York, New York

# **INFORMATION DISCLOSURE STATEMENT**

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Applicants wish to make of record the following documents (clean copies and a Form PTO-1449 listing the documents are enclosed). The following documents were cited in the International Search Report, mailed March 31, 2004 in the International application corresponding to the above-captioned case.

## **U,S. PATENT DOCUMENTS**

**Document No.** 

**Date** 

**A1** 

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6,015,684

1/18/2000

## **FOREIGN PATENT DOCUMENTS**

 Document No.
 Date
 Country

 B1
 WO 88/08025
 10/20/1988
 PCT

## **OTHER DOCUMENTS**

- C1 Yamane, Y. et al., "Influence of Oxygen and Glucose on Primary Metabolism and Astaxanthin Production by Phaffia Rhodozyma in Batch and Fed-Batch Cultures: Kinetic and Stoichiometric Analysis," Applied and Environmental Microbiology, vol. 63, no. 11, pp. 4471-4478 (1997).
- C2 Ho, K.P. et al., "Growth and Carotenoid Production of Phaffia Rhodozyma in Fed-Batch Cultures with Different Feeding Methods," Biotechnology Letters, vol. 21, pp. 175-178 (1999).
- C3 Fell, J.W. and Blatt, G.M., "Separation of Strains of the Yeasts Xanthophyllomyces Dendrorhous and Phaffia Rhodozyma Based on rDNA IGS and ITS Sequence Analysis," Journal of Industrial Microbiology and Biotechnology, vol. 23, pp. 677-681 (1999).

The Examiner's independent consideration of all of these documents and their relevance before issuance of the first official action is respectfully requested. The Examiner is also requested to initial and return a copy of the accompanying form PTO-1449 to evidence such consideration.

Copies of the International Search Report and International Preliminary Examination Report are included herewith. All documents cited in these reports are identified herein and copies of all documents, other than the U.S. patent document, are provided. See MPEP § 609(III)(A)(2)(A) (8<sup>th</sup> Ed., Rev. 2, May 2004, p. 600-128); See also 1276 OG 55 (August 5, 2003) (Waiving the requirement under Rule 98(a)(2)(1) to 1224087.1

provide a copy of each cited U.S. patent document for any application filed after June 30, 2003.).

This Information Disclosure Statement is being filed in accordance with the provisions under 37 C.F.R. §1.97(b)(2), within three months of the date of entry of the national stage of the international application. Accordingly, no fee is believed to be due. If, however, a fee is due, please charge the same to Deposit Account No. 02-4467. A duplicate copy of this sheet is enclosed.

If the Examiner has any questions regarding this paper, please contact the undersigned attorney.

Respectfully submitted,

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JC14 Rec'd PCT/PTO 23 MAR 2005

SHEET 1 OF 1

Form PTO-1449 U.S. DEPARTMENT OF COMMERCO (Rev. ) PATENT AND TRADEMARK OFFICE						
INFORMATI	ION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT . Tatsuo HOSHINO et al.				
(U:	se several sheets if necessary)	INTERNATIONAL FILING DATE	GROUP			
		16 Sentember 2003	Not Yet Assigned			

### **U.S. PATENT DOCUMENTS**

Examiner Initial	Cite No.	U.S. Patent Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	Al	6,015,684	1/18/2000	Jacobson et al.			
					I	:	

#### **FOREIGN PATENT DOCUMENTS**

	Document Number	Date	Country	Class Subclass		Translation	
						Yes	No
B1	WO 88/08025	10/20/1988	PCT				

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	C1	Yamane, Y. et al., "Influence of Oxygen and Glucose on Primary Metabolism and Astaxanthin Production by Phaffia Rhodozyma in Batch and Fed-Batch Cultures: Kinetic and Stoichiometric Analysis," Applied and Environmental Microbiology, vol. 63, no. 11, pp. 4471-4478 (1997)				
	C2	Ho, K.P. et al., "Growth and Carotenoid Production of Phaffia Rhodozyma in Fed-Batch Cultures with Different Feeding Methods," <u>Biotechnology Letters</u> , vol. 21, pp. 175-178 (1999).				
	C3	Fell, J.W. and Blatt, G.M., "Separation of Strains of the Yeasts Xanthophyllomyces Dendrorhous and Phaffia Rhodozyma Based on rDNA IGS and ITS Sequence Analysis," Journal of Industrial Microbiology and Biotechnology, vol. 23, pp. 677-681 (1999).				
EXAMINER		DATE CONSIDERED				

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.